

Data Flex Design Details
Jeff Andresen 5/23/2002

This document has design information for the Kapton Data Flex to be fabricated by CIREXX quote number 10865 and Fermilab PRN 19830. This is the prototype design with 10 tested Data Flex circuits to be delivered to Fermilab with a 2-3 week delivery time. This is a two trace layer Kapton flex circuit with Kapton used for the top and bottom solder mask. The traces are 1 oz. copper with a 5 mil minimum width and a 5 mil minimum clearance.

This is a controlled differential impedance design. The differential impedance is to be 75 ohms for the 5 mil traces with the differential pairs on top of each other (one on the top layer and the other on layer2).

The following is the board stackup with the Gerber file extension.

Layer 1, top Kapton layer,	*.SMT	////////////////////////////////////
Layer 2, top metal layer, trace layer 1,	*.TOP	-----
Layer 3, bottom metal layer, trace layer 2	*.BOT	-----
Layer 4, bottom Kapton layer	*.SMB	////////////////////////////////////

There are the following additional files.

- *.SST Top silkscreen layer
- *.TAP Drill tape files
- *.ASC Netlist file from the schematic.
- COMPS.TXT Components on board
- CONN.TXT connections on board
- *.DRD Drill drawing Gerber file
- *.DTS Drill tape summary
- *.LIS post processing report including apertures
- *.GTD GERBTOOL design file.

Please contact me if there are any technical questions and deliver the flex circuits to me.

Jeff Andresen 630-840-3178

Fermilab, Kirk and Wilson Sts., FCC368, Batavia, IL 60510.